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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,578	08/31/2001	Masakazu Funahashi	OHTN:004	9438

7590 08/03/2004

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EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,578

Applicant(s)

FUNAHASHI ET AL.

Examiner

Camie S Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on May 24, 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) 3-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed May 24, 2004 have been acknowledged.
2. Examiner acknowledges amended claims 1 and 2.
3. The rejection of claims 1-15 under 35 U.S.C. 112, second paragraph is withdrawn due to applicant's amended claims and argument.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 07-175238.

The Japanese reference discloses a compound that comprises a styryl group that has arylamino groups attached at both ends of the carbon-carbon double bond (see formula I).

The compound of the Japanese reference reads on instant claim 1 when $n=0$, R^2 is hydrogen, Ar^1 {corresponds to A and A' in instant claims 1 and 2} is a substituted or unsubstituted aryl group such as a phenyl group or a naphthyl group (see Table 1, nos. 28 and 31), Ar^2 and Ar^3 are substituted or unsubstituted phenyl rings and R^3 and R^4 {corresponds to C, C', D and D'} are substituted or unsubstituted phenyl groups such as a

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naphthyl, anthryl or phenyl group (see reference claim 1 and Table 1, nos. 22, 23 and 25).

When Ar¹ and R³ are naphthyl or anthryl groups, the Japanese reference satisfies the requirement for A' and C' to be substituted or unsubstituted condensed hydrocarbon group having 2 to 5 rings.

6. Claims 3-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fails to teach or suggest an electroluminescence device comprising a pair of electrodes and a film of organic compounds which is disposed between the pair of electrodes and comprises a single layer or a plurality of layers comprising at least a light emitting layer, wherein at least one of the layers of the film of organic compounds comprises the recited novel styryl compounds as described in instant claims 1 and 2.

Response to Arguments

7. Applicant's arguments filed May 24, 2004 have been fully considered but they are not persuasive. Applicant argues that the Japanese reference does not read on currently amended claim 1. Instant claim 1 requires groups A to D independently representing a substituted or unsubstituted alkyl group having 1 to 20 carbon atoms or a substituted or unsubstituted aryl group having 6 to 40 carbon atoms and at least two of A to D each represent a group represented by -Ar¹Ar² wherein Ar¹ represents a substituted or unsubstituted phenylene group or naphthalene group and Ar² represents a substituted or unsubstituted aryl group having 6 to 34 carbon atoms, excluding a case in which A and C represent biphenyl and B and represent phenyl group. The Ar¹ of the Japanese reference

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is equivalent to A in the instant formula (1). R^3 and R^4 of the Japanese reference are equivalent to C and D of the instant formula (1). The Japanese reference discloses that n can be zero and R^2 can be hydrogen; therefore, the formula comprises only $CH=CH$ between the two arylamino groups. Additionally, R^3 and R^4 can be biphenyl, which is not excluded because R^3 and R^4 are equivalent to C and D and satisfies the requirement for at least two of A to D be represented by $-Ar^1Ar^2$. Also, when Ar^1 is an aryl group the requirement for A and C to not be biphenyl is satisfied. The Japanese reference satisfies all the limitations of instant claim 1.

8. Applicant's amendment of claim 2 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30

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am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached at (571) 272-3186. The fax phone number for the Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RENA DYE
PRIMARY EXAMINER
Supervisory
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